US 97 PARKWAY PLAN
DRAFT FACILITY PLAN

BMPO Policy Board and TAC Meeting
August 13, 2020

Agenda

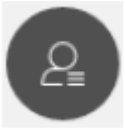
1. **Introductions and Meeting Purpose**
2. **Project Status**
3. **Parkway Plan Overview**
   - Background
   - Public Involvement
   - Existing and Future Conditions
   - Alternatives Evaluation
   - Recommended Investment Strategy
   - Findings of Compliance and Consistency
   - Discussion
4. **Next Steps**

Virtual Meeting Guidelines Committee Members

- You will be on mute when you first join the meeting
- Staff will present on each section
- During the presentation, committee members can use the chat function to raise questions.
- Following the presentation of each section, staff will answer questions that have been listed in chat and committee members can use the chat function to raise new questions or let staff know if you have a comment or question.
- Staff will call on members and unmute them to hear their comments/questions.
- We will be seeking consensus on this planning effort. Please either raise any concerns at the meeting or send in comments within a week.
- Technical issues and assistance can be provided through email to janderson@bendoregon.gov or calling (541) 550-0848.

Virtual Meeting Guidelines

- This meeting will be recorded for note taking purposes.
- You will be on mute when you first join the meeting. Please mute yourself when you are not speaking
- If you are having technical difficulties during the meeting, please use the chat function to send a message to the host.
- If you have a question or would like to comment, please use the **raise hand** function by clicking on the participants icon; in the participants pane, look at the bottom right corner and click on the hand icon to raise your hand. Please click on the icon again to lower your hand when you are done.
  (Hand Raise is very small, on bottom right)
- Phone-only attendees can press *3 to raise their hands and are asked to wait until someone calls on them. The host, presenter, or panelist can see which attendees have raised their hands and then unmute each one in turn so they can ask a question. If attendees want to lower their hands after raising them, they can press *3 again.

Webex Key buttons  Chat  Participants  Hand Raise

Roll Call: Policy Board Members & Staff

Policy Board

- Justin Livingston, Chair, City of Bend
- Anthony DeBone, Vice-Chair, Deschutes County
- Bob Townsend, ODOT Region 4
- Barb Campbell, City of Bend
- Chris Piper, City of Bend

Bend Metropolitan Staff

- Tyler Deke, Manager
- Jovi Anderson, Program Coordinator
- Andrea Napoli, Senior Planner
- Cameron Prow (Type-Write II, Recorder)

Roll Call: Technical Advisory Committee

- Karen Swirsky, City of Bend
- Andrea Breault, Cascades East Transit (CET)
- Peter Russell, Deschutes County
- Rick Root, Deschutes County Bicycle & Pedestrian Advisory Committee (BPAC)
- Henry Stroud, Bend Park and Recreation District
- Rick Williams, ODOT Region 4
- Joe Viola, Central Oregon Community College (COCC)
- Casey Bergh, Oregon State University Cascades
- Michel Bayard, Citizen
- Robin Vora, Citizen
- Brian Potwin, Commute Options
- Sharon Smith, Bend La Pine Schools
- Scott Edelman, Oregon Department of Land Conservation and Development*
- Rachael Tupica, Federal Highway Administration*
- Jeremy Borrego, Federal Transit Administration*
- *indicates non-voting members

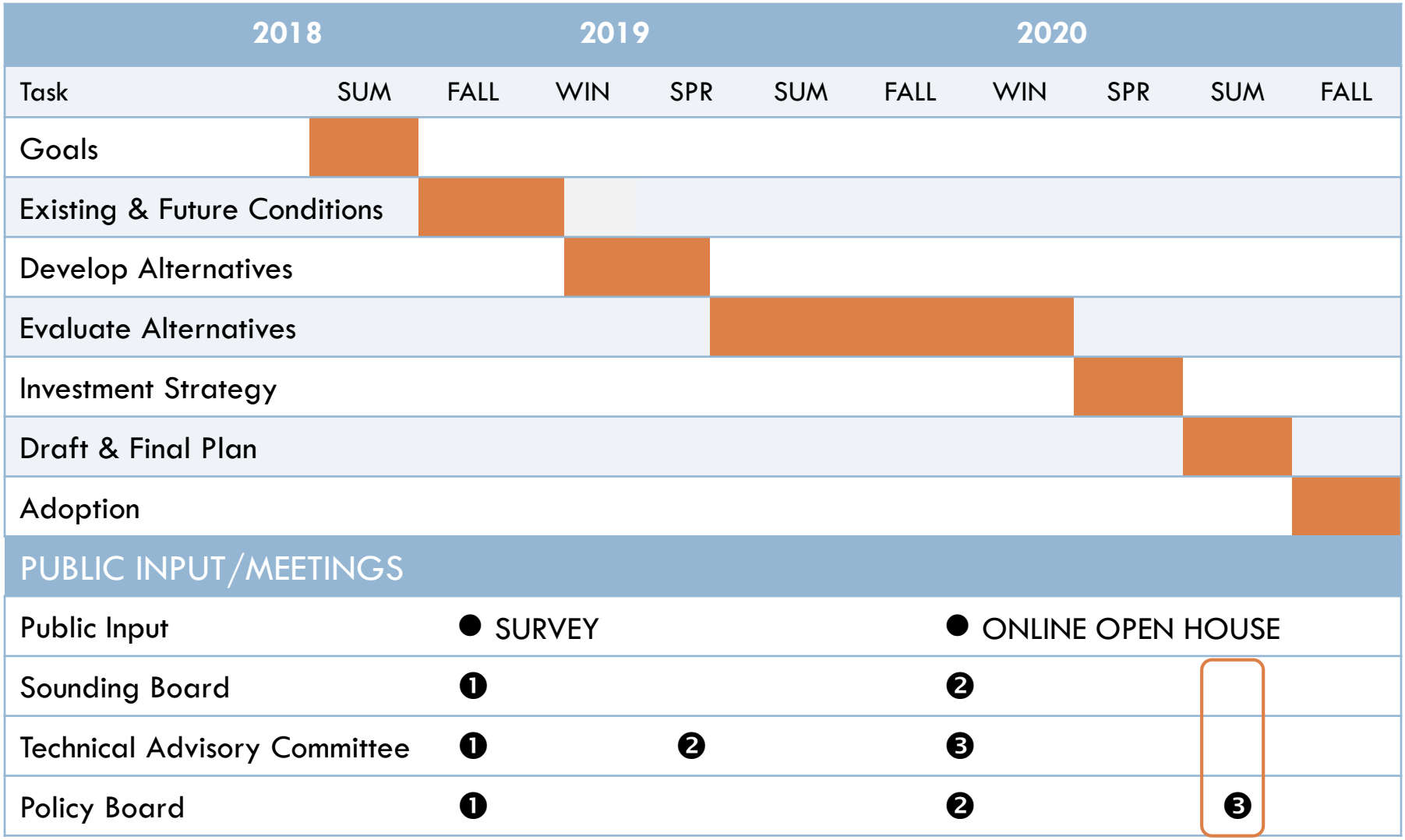
Members of the public will not be part of the roll call, Staff will identify public members by name.

Plan Purpose and Status

Meeting Purpose

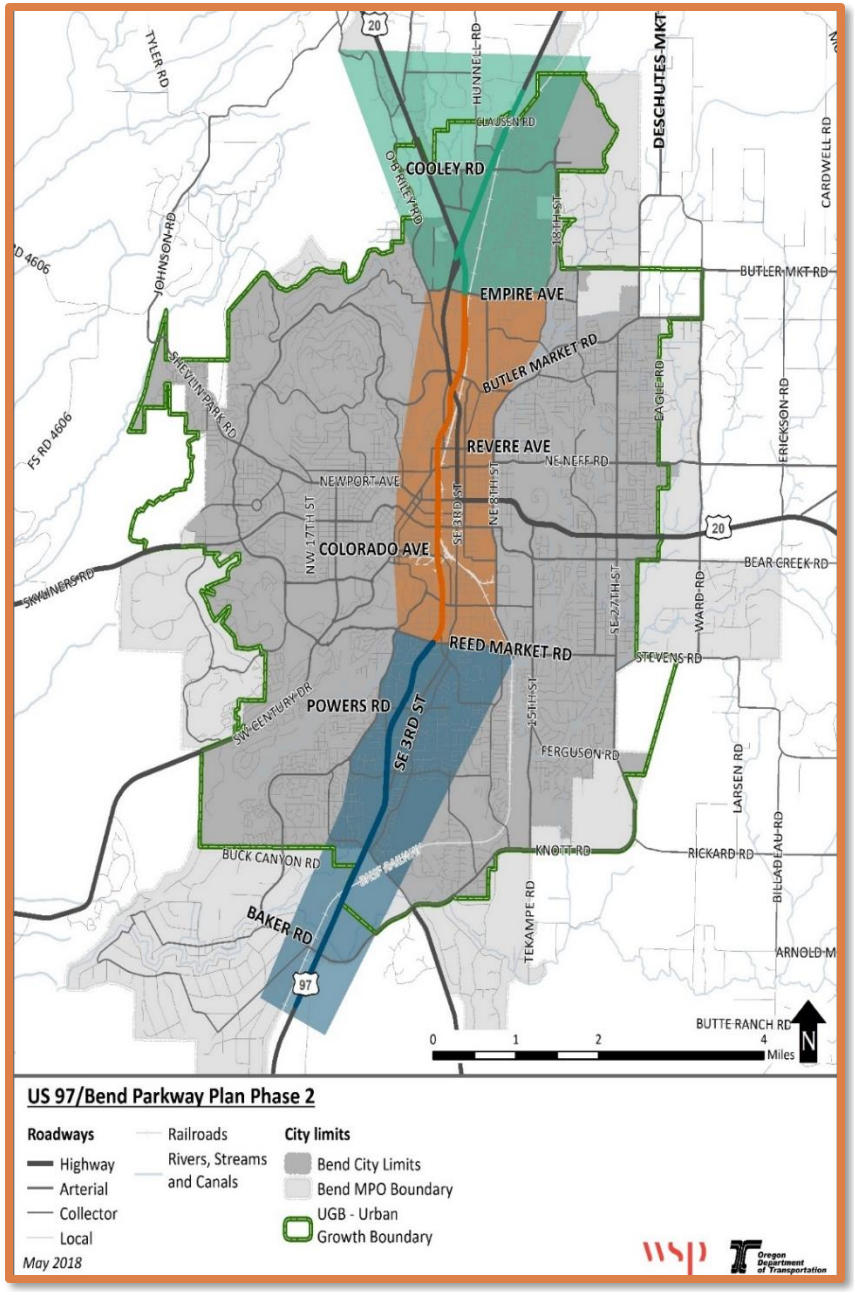
- Review draft Facility Plan
- Provide input on Findings of Compliance with Statewide Planning Goals and Plans and Findings of Consistency with City and County Plans

Status and Schedule



Parkway Plan

- ODOT Facility Plan
- Builds on prior plans
- Final Plan will be adopted by:
  - Oregon Transportation Commission
  - City of Bend
  - Bend MPO - element of Metropolitan Transportation Plan (MTP)



Vision, Goals and Public Engagement

US 97 Parkway – Vision adopted 2018

In 2040, the Parkway is a key part of the larger US 97 highway corridor, which has a primary function of providing safe and reliable travel between communities and connections to recreation areas and economic centers with minimal interruptions, including travel to and from Bend as a major regional destination given its many major employment and commercial areas. The Parkway continues to support statewide, regional, and local interests as a critical asset in support of communities and economies, relative to the hierarchy of US 97's national, statewide, and regional designations.

Major elements

- **US 97 Bend Parkway** is
  - Part of a significant statewide route.
  - A significant local route.
  - Facilitating through travel.
- The **US 97 Bend Parkway** is fully integrated into the overall Bend multimodal transportation system with strategic on-/off-ramps, overcrossings/ undercrossings, and a strong parallel system that accommodates the community's transportation needs.
- Local traffic growth is primarily accommodated on the local roadway system.
- The **US 97 Bend Parkway** Corridor is safer for all users and more efficient due to access changes.
- The **US 97 Bend Parkway** Corridor is part of a transportation system that supports active transportation modes such as walking, biking and taking public transportation.

Goals

1. Improve safety for all modes
2. Support economic development throughout the region and state
3. Manage transportation mobility into the future
4. Consider accessibility to key destinations now and in the future
5. Facilitate the use of multimodal travel options
6. Enhance the environment
7. Identify cost effective solutions
8. Develop an implementation plan

Project Committees

- Project management Team
- BMPO Technical Advisory Committee
- BMPO Policy Board
- Bicycle and Pedestrian Working Group
- Sounding Board

Public Outreach

- MPO Policy Board/TAC and Sounding Board Meetings
- 2018 survey reviewed conditions and obtained input on vision and needs
- 2019 on-line open house and survey
  - Asked for input on recommended projects
  - Level of urgency and concerns
  - 1122 responses
- Environmental Justice Communities
  - No identified Title VI populations
  - Distributed survey to social service organizations
  - In person tabling at grocery stores

Existing and Future Conditions

US 97 Parkway Usage

Today, US 97 serves **between 20,000 and 50,000 vehicles** per day.

About **90%** of those trips begin and/or end somewhere in Bend.

US 97 Parkway Usage

Between 2014 and 2040, Bend is **expected to grow** by 28,045 households and 27,740 jobs.

In 2040, daily trips on US 97 are projected to range from about 23,000 to nearly 80,000.

About **90%** of those trips are **still expected** to begin and/or end somewhere in Bend.

Future Operations (2040)

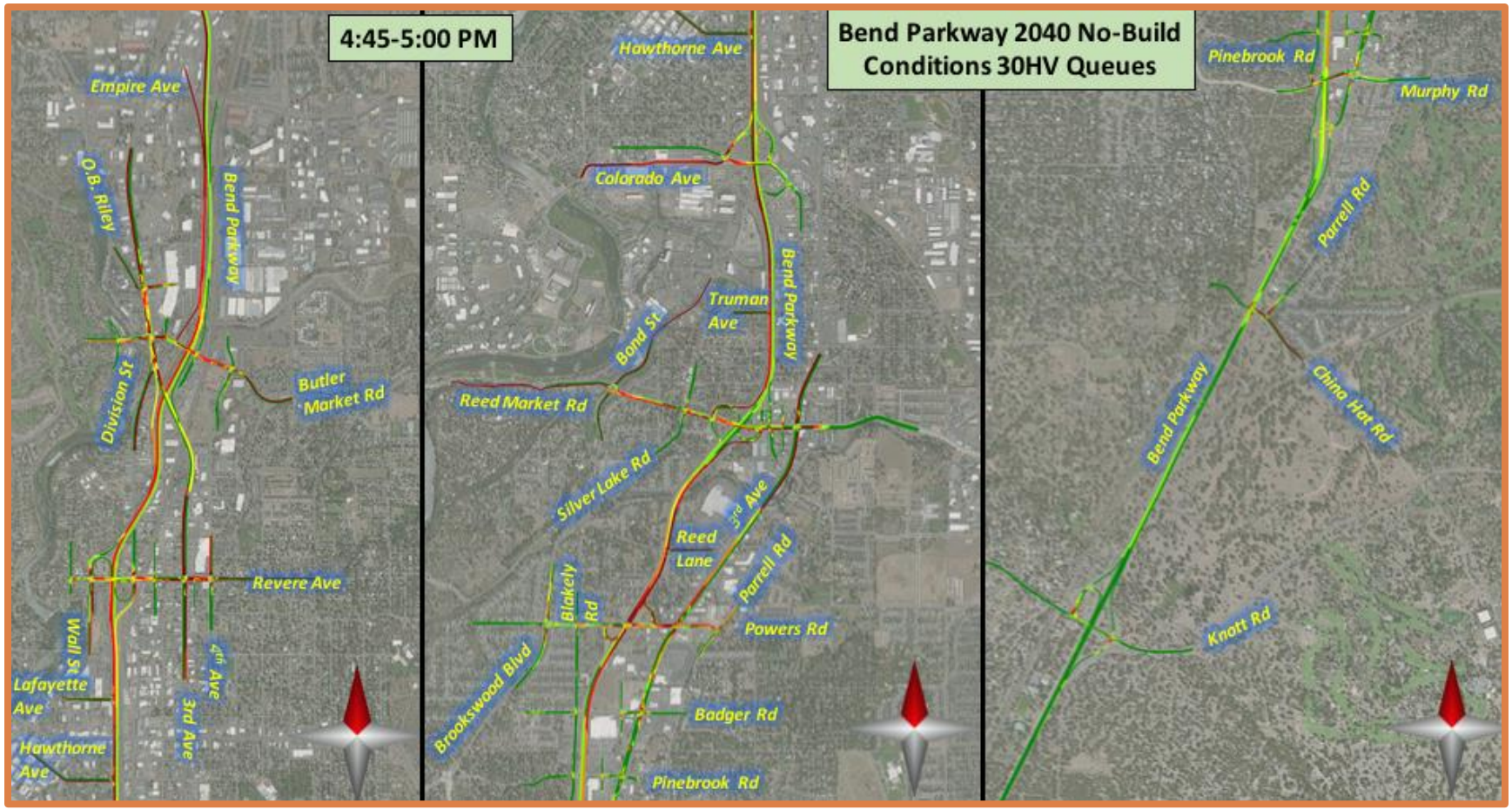
Mainline peak hour demand will **exceed capacity.**

All major East-West connections will **operate near or over capacity.**

of the 15 ramp connections will **fail to meet demand.**

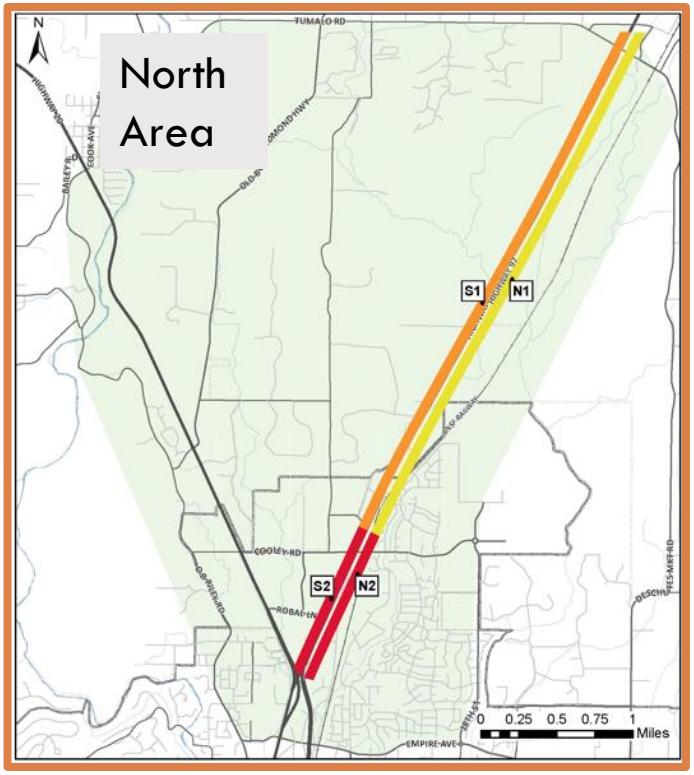
US 97 Transportation Conditions

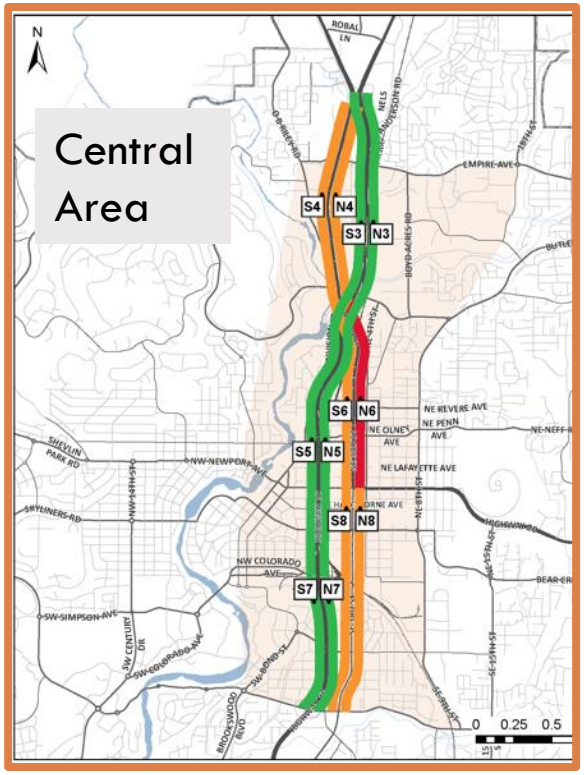
Congestion – Queuing under Future Conditions (2040)

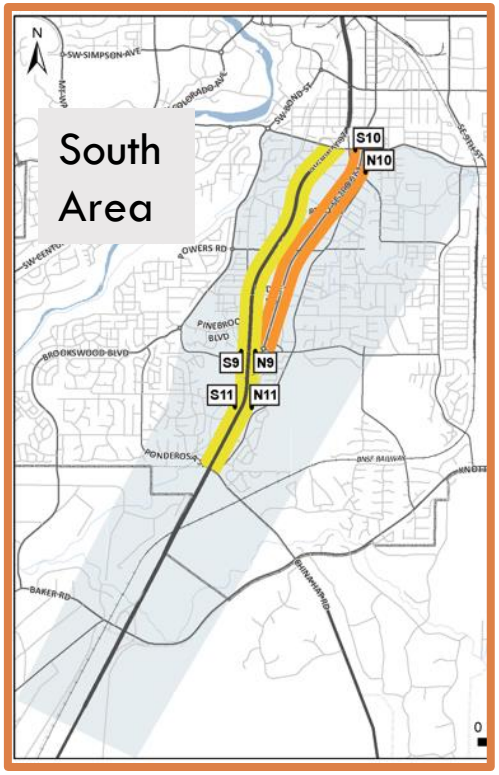


US 97 Transportation Conditions

Congestion – Travel Time Reliability (Existing)







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US 97 Transportation Conditions

Congestion – Travel Time Reliability (Future)

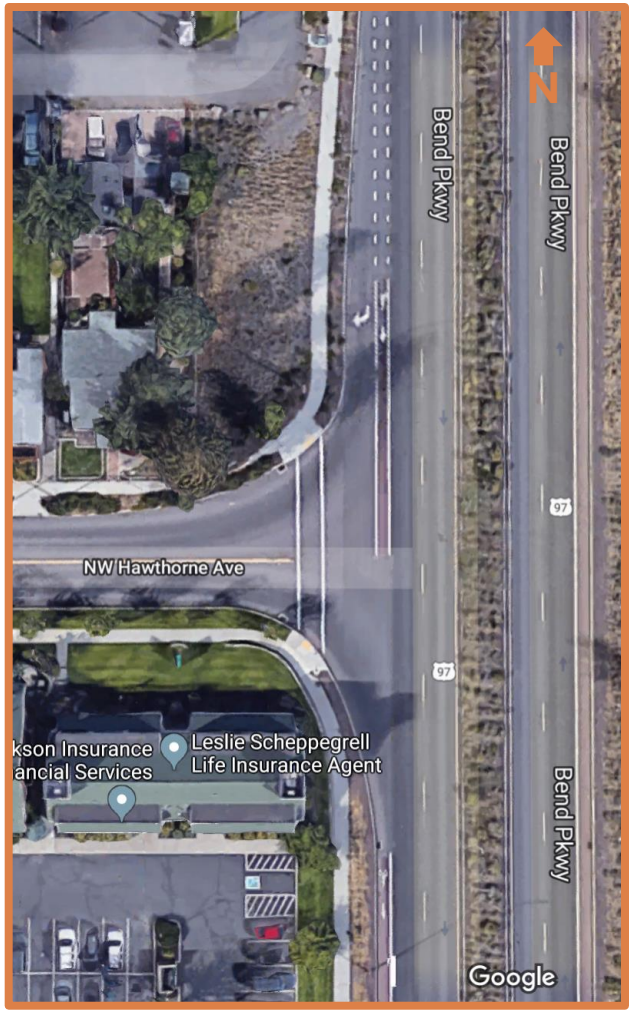
- Travel time reliability will get worse for most segments on the US 97 corridor in future no build conditions.
- Key locations showing significant future deterioration include:
  - Clausen Road to Cooley Road
  - Robal Road to the US 20 interchange
  - Hawthorne Avenue to the Colorado Avenue interchange.

Note: Current INFRA project in North Study area may address issue at Clauson and Cooley Roads

US 97 Transportation Conditions

Access

- Shorter gaps and lack of merge distance lead to **unsafe maneuvers** ("shooting the gap")
- The existing at-grade intersections on the Parkway do not have acceleration lanes, which would take over 900 feet to accommodate.



US 97 Transportation Conditions

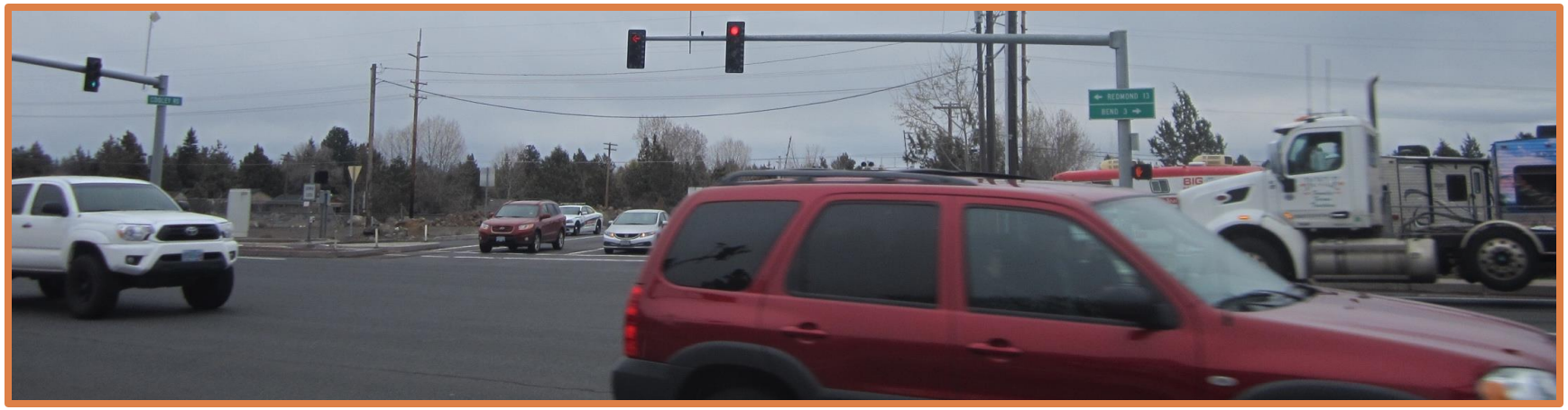
Safety

- High-Crash Parkway Segments:
  - North City Limits to Robal
  - Powers to Murphy *(removal of Pinebrook intersection and construction of Murphy interchange may have mitigated this)*

US 97 Transportation Conditions

Safety

- 3 intersections flagged for high crash severity/ frequency:
  - Cooley Road
  - Powers Road
  - Pinebrook Boulevard *(again, may have been mitigated)*



US 97 Transportation Conditions

Walking and Biking

- Traveling the Parkway on foot or by bicycle is **stressful**, even where walking and biking facilities are present.
- **Enhanced crossings** with flashing beacons help with crossing the Parkway today, but over or under-crossings will be needed in the future.

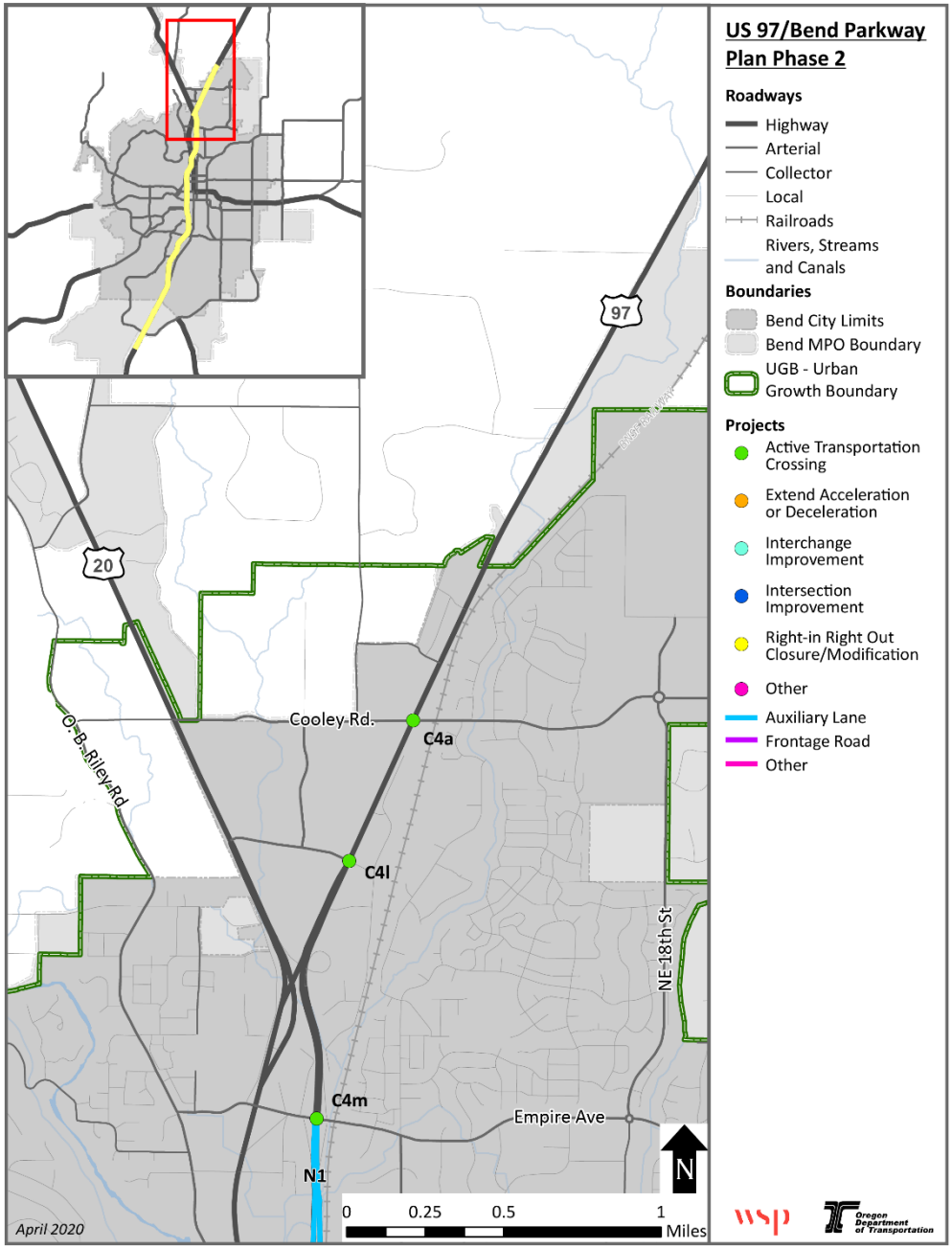
Recommended Investment Strategy

Investment Strategy - Background

- Follow on to evaluation of alternatives
- Tier 2 evaluation based on project goals, objectives and criteria
- Reviewed by MPO Policy Board and TAC
- Input by Sounding Board and On-line Open house
- Final technical memo prior to draft plan
- Roadmap for implementation of long-term vision

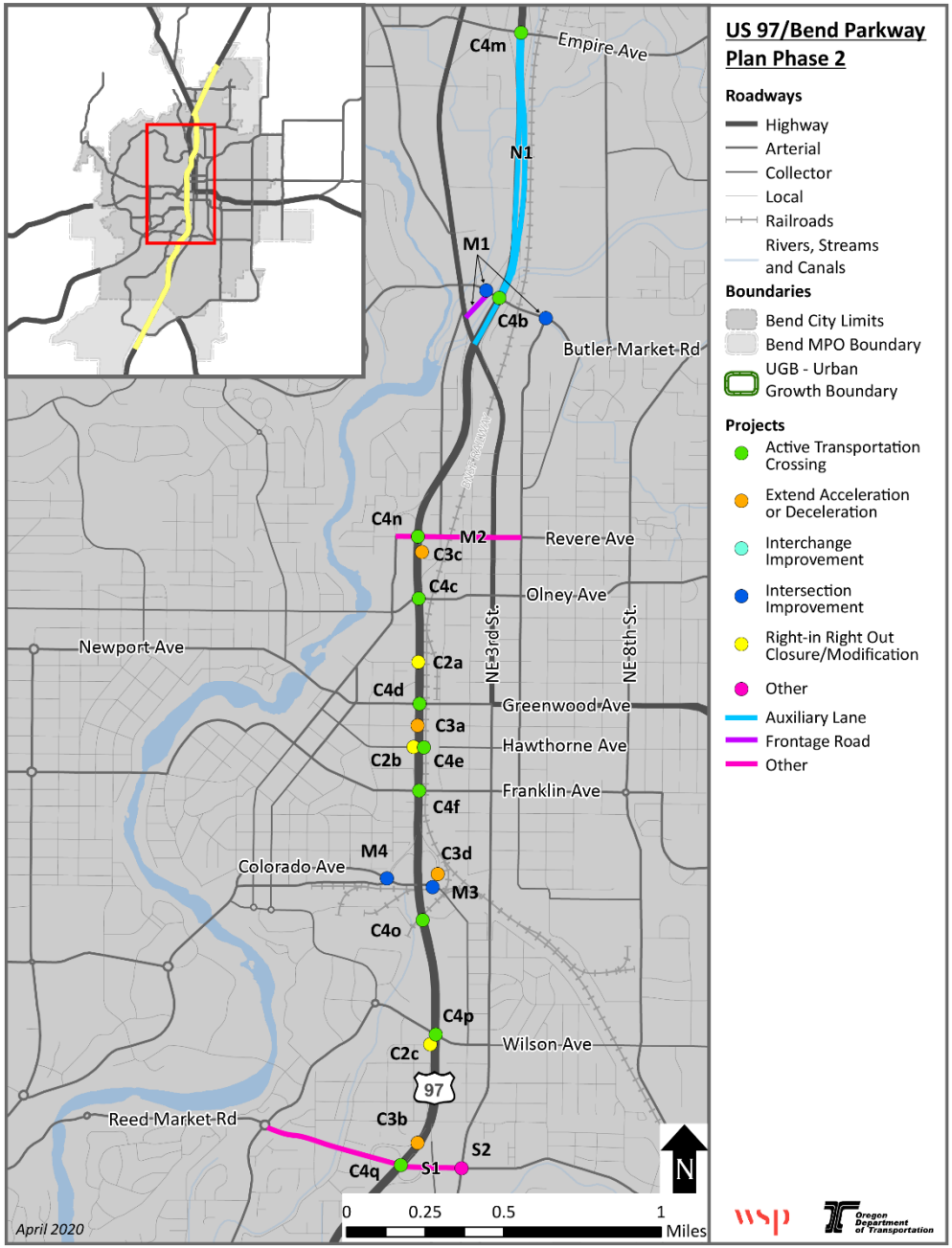
Project Maps

North Study Area



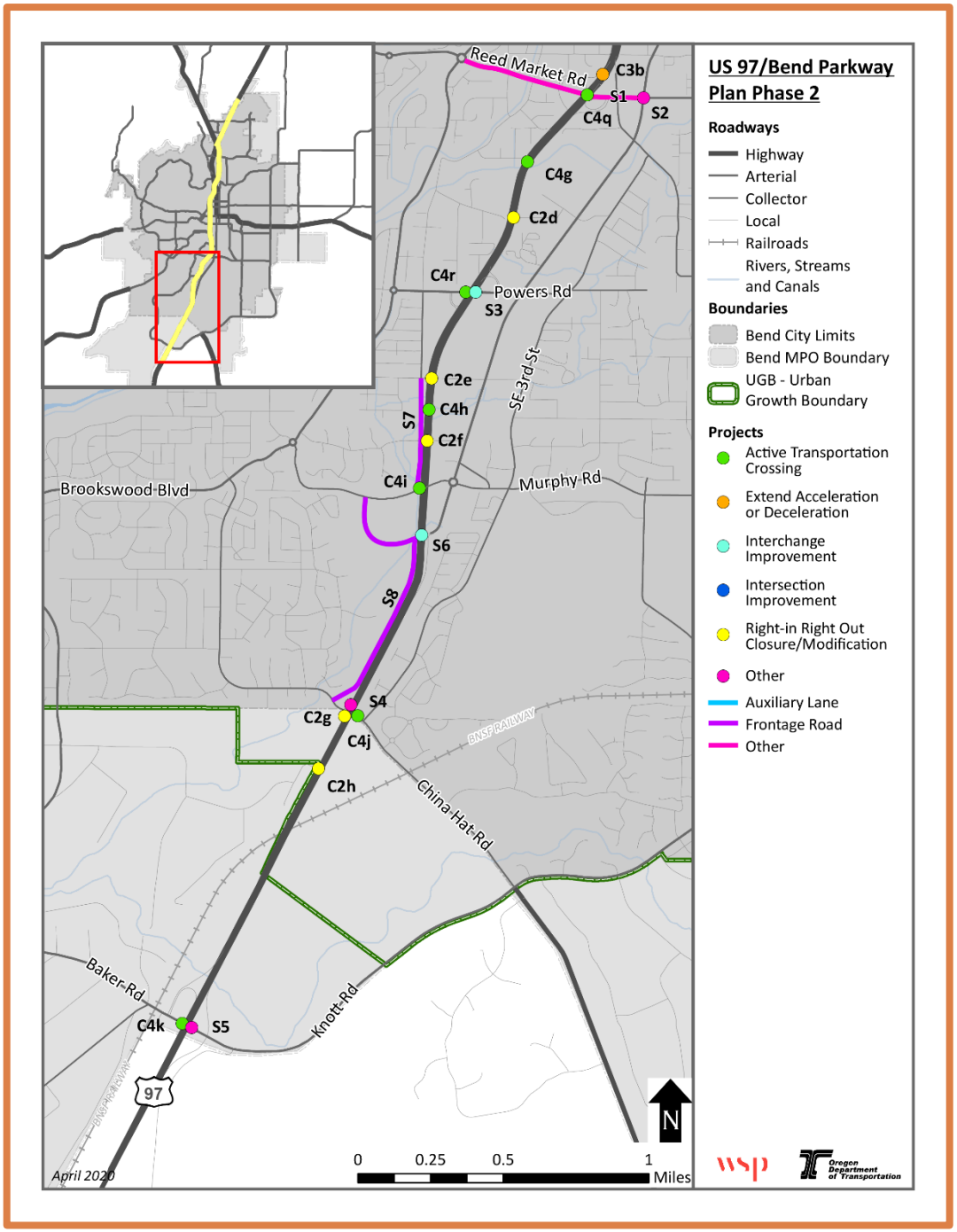
Project Maps

Central Study Area



Project Maps

South Study Area



Recommendation Proposed for Tiers

TIER | PROJECTS

1 intended for implementation in the short-term | 0-10 years

2 intended for implementation in the medium-term | 11-15 years

3 designated for implementation in the long-term | 16-20 years

Tiering considerations

- Timing of need
  - severity of need through technical analysis
  - interrelationship with other projects
  - type of solution
- Potential for phasing
- Opportunities for funding

Overview of Tier 1 projects

- 29 projects
- Most address needs identified for the short-term
- Others are included due to linkages with other projects or funding
- All but two RIRO projects and the majority of active transportation crossing projects
- None are development driven

Overview of Tier 2 projects

- 21 projects
- May be needed in the short-, mid-, or long-term
- Timeline due to phasing or funding limitations
- All development driven projects are Tier 2

Overview of Tier 3 projects

- One project: Active Transportation Crossing at Wilson Avenue (C4p).

Project Tiers and Next Steps

Project Number	Project Name	Proposed Tier	Next Steps
C1	Install Ramp Meters	Tier 2	Concept of Operations (Cost is approximately $50K). Would operate most effectively if implemented together rather than ramp by ramp.
C2a	Close Lafayette Ave. right turn onto Parkway and extend the deceleration lane for the right turn off the Parkway.	Tier 1	Advance scoping to consider how to bundle RIROs. Consider moving forward with top locations (Lafayette, Hawthorne, Reed Lane and Truman) first. Consider whether they could be done in phases, without final mitigation, and whether all should be done together or broken up. The scoping study could also include the strategy for the corridor.
C2b	Close Hawthorne Ave. right turn onto Parkway and extend the deceleration lane for the right turn off the Parkway.	Tier 1	
C2c	Close Truman Ave. RIRO intersection with Parkway	Tier 1	
C2d	Close Reed Ln. RIRO intersection with Parkway	Tier 1	
C2e	Close Badger Rd. RIRO intersections with Parkway	Tier 1	
C2f	Close Pinebrook Blvd. RIRO intersections with Parkway	Tier 1	
C2g	Close China Hat Rd. and Ponderosa St. RIRO intersections with Parkway	Tier 2	S4 (China Hat Overcrossing) would likely require closure. Development Driven.
C2h	Close Rocking Horse Rd. RIRO intersections with Parkway	Tier 2	Consider timing for closure in S5 (Baker/Knott IAMP) and S6 (Murphy interchange).
C3a	Extend Southbound right turn deceleration lane at Hawthorne Avenue	Tier 1	
C3b	Extend southbound deceleration lane to Reed Market Rd	Tier 1	
C3c	Extend Revere Avenue northbound on-ramp acceleration lane	Tier 2	
C3d	Extend acceleration lane for Colorado Ave northbound on-ramp	Tier 2	

Project Tiers and Next Steps

Project Number	Project Name	Proposed Tier	Next Steps
C4a	Active Transportation Crossing Improvements: Cooley Rd	Tier 1	Coordinate with INFRA grant design.
C4b	Active Transportation Crossing Improvements: Butler Market Rd	Tier 1	Coordinate with TSP improvements.
C4c	Active Transportation Crossing Improvements: Olney Ave	Tier 1	Coordinate with TSP improvements.
C4d	Active Transportation Crossing Improvements: Greenwood Ave	Tier 1	Conceptual design and analysis
C4e	Active Transportation Crossing Improvements: Hawthorne Crossing	Tier 1	Develop feasible design.
C4f	Active Transportation Crossing Improvements: Franklin Ave	Tier 1	Conceptual design and analysis
C4g	Active Transportation Crossing Improvements: Canal/Garfield undercrossing	Tier 2	Conceptual design
C4h	Active Transportation Crossing Improvements: Badger/Pinebrook Overcrossing	Tier 2	Conceptual design to determine optimal location (Badger vs Pinebrook)
C4i	Active Transportation Crossing Improvements: Murphy Rd	Tier 1	Conceptual design
C4j	Active Transportation Crossing Improvements: China Hat Rd Overcrossing	Tier 2	Conceptual design for S4
C4k	Active Transportation Crossing Improvements: Baker Rd/Knott Rd	Tier 2	Coordinate with outcomes from IAMP.
C4l	Active Transportation Crossing Improvements: Robal Rd	Tier 1	Coordinate with INFRA grant design
C4m	Active Transportation Crossing Improvements: Empire Blvd	Tier 2	Identify Empire Blvd project (3rd to SB Ramp terminal)
C4n	Active Transportation Crossing Improvements: Revere Ave	Tier 2	Refine M3 conceptual design
C4o	Active Transportation Crossing Improvements: Aune Ave	Tier 1	Develop Aune Extension conceptual design
C4p	Active Transportation Crossing Improvements: Wilson Ave	Tier 3	Conceptual design
C4q	Active Transportation Crossing Improvements: Reed Market Rd	Tier 2	Complete S1
C4r	Active Transportation Crossing Improvements: Powers Rd	Tier 1	Refine Conceptual design for S3

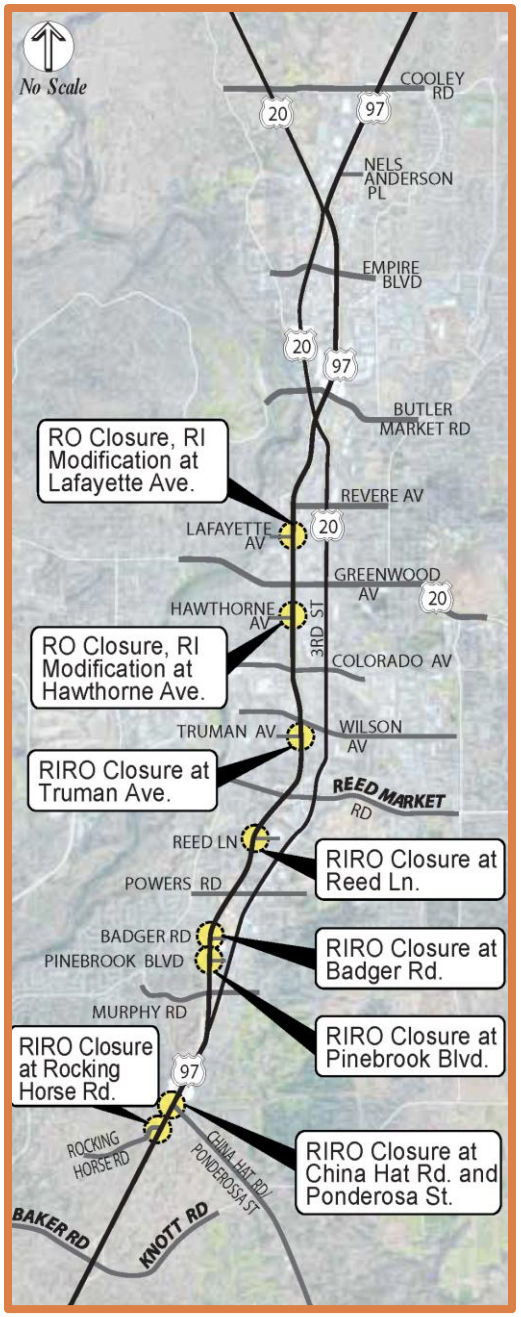
Project Tiers and Next Steps

Project Number	Project Name	Proposed Tier	Next Steps
C5	Widen shoulders to meet design standards at strategic locations in corridor	Tier 2	Study corridor to determine which locations this should be completed based on operational issues/needs and available ROW. This could be bundled with RIRO study.
C6	Weather warning system	Tier 2	Concept of Operations. ODOT should coordinate with the County and MPO as this is also part of the Deschutes County ITS Plan.
C7	Variable speed signs	Tier 2	
C8	Incident management	Tier 2	
C9	Enhanced signal operations at ramp terminals	Tier 1	Complete ATC conversion plan and obtain additional radar funding.
C10	Traveler information signing	Tier 1	Incorporate into the near-term Infra Grant project in the Cooley – Empire area, which may change local circulation.
C11	Roadside Traveler Information Dissemination	Tier 1	ODOT should coordinate with the County and MPO as this is also part of the Deschutes County ITS Plan.
N1	FEIS Projects	Tier 1	INFRA grant is Phase 1
M1	Butler Market Intersection Improvements	Tier 1	
M2	Revere Avenue Lane Reconfiguration	Tier 2	
M3	Colorado Avenue Signal (or roundabout) at NB ramp	Tier 1	
M4	Colorado Avenue Improvement to SB ramp intersection	Tier 2	Conduct study
S1	Reed Market Refinement Study from Bond Street to 3rd Street	Tier 1	Complete Refinement Study.
S2	Dedicated left turn lane Reed Market Rd and 3rd St (Through the TSP)	Tier 1	
S3	Powers Road Interchange	Tier 1	Refine preliminary design and begin ROW acquisition.
S4	China Hat Overcrossing	Tier 2	
S5	IAMP at Baker Rd/Knott Rd interchange	Tier 1	
S6	Murphy Tight Diamond Interchange	Tier 1	ODOT and City of Bend to develop a detailed coordination plan for implementation of Powers and Murphy Road Interchange projects
S7	Murphy North Frontage Road	Tier 2	
S8	Murphy South Frontage Road	Tier 2	Could be built in phases based on development

Right-In-Right-Outs

- Closure of all at grade right-out onto Parkway
- Extension of deceleration lanes at right-ins at Hawthorne and Lafayette
- Closure of all other right-ins on Parkway

Note: Nels Anderson Place will be reconfigured as part of INFRA project



Alternative Mobility Targets

Alternative Mobility Targets - Purpose

1. In locations where local and/or state roadways not anticipated to meet LOS and/or V/C ratio mobility targets in 20 years
2. Adopting alternate mobility targets adjusts performance expectations to fit financial realities
3. Helps reduce the future need for state and local investment while still allowing local development plans
4. Allows local govt to implement comp plan and economic plans and sets more realistic requirements for development

Alternative Mobility Targets – Parkway

- No-Build scenario included financially constrained projects in the 2019 MTP (but not current TSP reasonably likely list)
- Full Build (Parkway) scenario used for evaluation likely underestimates need for new targets
- 18 of 22 intersections will not comply with ODOT mobility targets by 2040 under No-Build
- Under Parkway Build scenario, 13 intersections would not meet target
  - 11 of those have V/C ratios higher than 1
- Segment of Parkway from SB on-ramp at Division to the Colorado would fail to meet targets

Alternative Mobility Targets – Parkway

- Approximate timing determined by assessing the level of development present vs. forecast
- If currently at or near target today, then short term
- If uncongested and undeveloped, then longer term

Alternative Mobility Targets – Parkway

- City of Bend completed the refined technical work reflecting a 2040 scenario with reasonably likely projects
- Still identified many locations where alternative mobility targets would be needed but includes a more accurate assessment of the degree of additional congestion
- The process for considering the adoption of alternative mobility targets requires further conversations with local elected officials and other affected stakeholders to ensure everyone understands and supports the trade-offs involved.

Findings

Findings of Compliance, Consistency and Compatibility

- Written statements adopted by an agency to explain why a decision is made
- Assure applicable legal standards have been addressed
  - Compliance with applicable statewide planning goals
  - Consistency with the OTP and applicable modal and topic plans
  - Compatibility with acknowledged comprehensive plans
- State Agency Coordination to review

Compliance with Statewide Planning Goals

- OAR 734-0519 (Highway Access Management)
- Transportation Planning Rule
- Oregon Land Use Planning Goals
  - Goal 1 – Citizen Involvement
  - Goal 12 – Transportation
  - Goal 14 - Urbanization

Consistency with State Plans

- Oregon Transportation Plan, 2006
- Oregon Highway Plan, 1999/2015
- Oregon Freight Plan, 2011/2017
- Oregon Bicycle and Pedestrian Plan, 2016
- Public Transportation Plan, 2018
- Oregon Transportation Options Plan, 2015

Consistency with State Plans

- Oregon Transportation Safety Action Plan, 2016
- Oregon Resilience Plan, 2013
- Transportation Reinvestment Innovation and Planning for 97 Partnership, 2013
- US 97 Freight Plan
- Truck Parking: An Emerging Safety Hazard to Highway Users
- Oregon Commercial Truck Parking Study, 2020

Compatibility with Comprehensive Plans of Affected Counties and Cities

- Deschutes County Comprehensive Plan and Transportation System Plan, 2012
- Deschutes County Intelligent Transportation Systems Plan, 2020
- 2040 Metropolitan Transportation Plan, 2019
- City of Bend Urban Growth Boundary Expansion, 2016
- Bend Comprehensive Plan, 2016
- Bend Transportation System Plan
- Multimodal Traffic Safety Study 2012-2014
- Bend Area Transportation Safety Action Plan (TSAP), 2019
- Bend Safety Implementation Plan, 2015

Compatibility with Comprehensive Plans of Affected Counties and Cities

- 2015-2025 Strategic Implementation Plan for Walking and Biking Infrastructure, 2014-2015
- Hawthorne Avenue Bridge Technical Memorandum, 2016
- Cascades East Transit (CET) 2040 Transit Master Plan, 2020
- Parkway Agreements
- NE Bend Transportation Study, 2009
- US 97 Bend North Corridor Project FEIS, 2014
- Bend North Area Transportation Study, 2015 (not formally adopted)
- Juniper Ridge Master Plan, 2008
- Juniper Ridge Intergovernmental Agreement, 2010
- Juniper Ridge Urban Renewal Plan, 2005, and First Amendment, 2019

Compatibility with Comprehensive Plans of Affected Counties and Cities

- Bend Central District Multimodal Mixed Use Area Plan, 2014
- Core Area TIF District Plan
- Empire Avenue Extension, 2006
- Murphy Corridor Refinement Plan, 2008
- Murphy Crossing Urban Renewal Plan, 2008
- Reed Market Intersection Evaluation, 2012
- South Bend Parkway Refinement Plan, 2004

Next Steps

Next Steps

1. Draft Parkway Plan: Summer 2020
   - MPO TAC/Policy Board review
2. City, MPO and OTC Adoption: Fall 2020
   - 30 day State Agency Coordination review by City, County, MPO, and DLCD
   - Local agency approval/adoption
   - ODOT Planning and Policy Development Team review
   - DOJ review
   - 45 day public review

Note: Some of these steps may take place simultaneously